

What is claimed is:

1. An apparatus for treating gas with at least one agent, the gas being received into the apparatus from a gas source, the apparatus comprising:
 - a housing defining at least one chamber having an entry port and an exit port, the entry port for connection to a gas source to receive therefrom gas stream; and
 - the at least one chamber receiving a quantity of an agent to be admixed with and carried by the gas stream out through the exit port of the housing.
2. The apparatus of claim 1, and further comprising a container for containing a quantity of an agent.
3. The apparatus of claim 2, wherein the container comprises an opening that releases the agent into the chamber.
4. The apparatus of claim 2, wherein the container is pre-filled with a quantity of an agent.
5. The apparatus of claim 2, wherein the container comprises a port to receive a quantity of an agent.
6. The apparatus of claim 1, and further comprising at least one layer of an absorbent material positioned inside the chamber to retain a quantity of an agent.
7. The apparatus of claim 1, and further comprising a plurality of separate chambers through which the gas stream flows, each chamber having a port to receive a quantity of a different type of agent to be admixed with the gas stream.
8. The apparatus of claim 2, wherein the container comprises a bag member suitable for containing a quantity of an agent and having an opening that is sized so as to permit release of a quantity of agent from the bag member into the chamber for treating the gas with the agent.
9. The apparatus of claim 8, wherein the bag member is disposed inside the chamber.
10. The apparatus of claim 8, and further comprising a plurality of bag members, each to contain a different type of agent.
11. The apparatus of claim 10, wherein the plurality of bag members are

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disposed inside or outside of the housing.

12. The apparatus of claim 2, wherein the container comprises a bag member positioned inside the chamber suitable for containing a quantity of an agent, the bag member being formed of a semi-permeable material so that the gas stream flowing through the chamber is treated with the agent contained within the bag.

13. The apparatus of claim 1, and further comprising:

at least one bag member having an opening that is sized so as to permit release of a quantity of agent therefrom;

at least one layer of absorbent material;

a tube member having first and second ends, the first end being coupled to the opening of the bag member and the second end being positioned proximate the at least one layer so as to deliver the agent onto the layer.

14. The apparatus of claim 13, wherein the bag member is disposed inside the chamber or outside the chamber.

15. The apparatus of claim 2, wherein the container comprises an elongated tube member extending inside the chamber and having a proximal and a distal end, a restrictive opening being provided in the elongated tube member to release one or more agents into the chamber when the elongated tube member is filled with a quantity of an agent.

16. The apparatus of claim 2, and further comprising an elongated tube member extending inside the chamber and having a proximal end and a distal end, a plurality of openings being provided along a length of the elongated tube member to release one or more agents into the chamber when the elongated tube member is filled with a quantity of an agent.

17. The apparatus of claim 2, and further comprising a pressurizer for pressurizing the agent inside the container, wherein the container comprises a valve for releasing the quantity of agent into the chamber in response to pressure inside the container.

18. The apparatus of claim 17, wherein the container is positioned inside or

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outside the chamber.

19. The apparatus of claim 2, wherein the container comprises an inkjet printhead having at least one nozzle positioned proximate the at least one opening of the housing for releasing vapor bubbles of at least one agent into the chamber through the opening when energized by control signals.

20. The apparatus of claim 19, and further comprising:

at least one reservoir associated with the inkjet printhead for containing a volume of one or more agents; and

a controller coupled to the inkjet printhead and supplying control signals to the inkjet printhead to control the release of one or more agents from the inkjet printhead into the chamber.

21. The apparatus of claim 1, and further comprising humidity sensing means positioned in the chamber in the flow path of the gas stream.

22. The apparatus of claim 21, and further comprising heating means disposed within the chamber for heating the gas.

23. The apparatus of claim 22, and further comprising:

temperature sensing means disposed within the chamber for sensing the temperature of the gas in the chamber; and

control means connected to the temperature sensing means and to the heating means and responsive to the temperature sensing means to control electrical power to the heating means so as to regulate the amount of heat applied by the heating means to the gas within the chamber.

24. The apparatus of claim 23, wherein the control means is responsive to determining when the relative humidity of gas drops below a critical relative humidity threshold to terminate electrical power to the heating means.

25. A method for treating gas that is to be delivered to body cavity, body space or body surface of an animal, comprising the steps of:

directing a gas stream from a gas source into a chamber; and

treating the gas stream with one or more agents by releasing a quantity

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of one or more agents into the chamber to be carried by the gas stream out through an exit port of the chamber for delivery to an animal.

26. The method of claim 25, wherein the step of treating comprises releasing a quantity of at least one agent in solid, liquid or gas form, or a combination of agents in any combination of solid, liquid or gas form.

27. The method of claim 25, and further comprising step of humidifying the gas within the chamber with a volume of humidifying solution.

28. The method of claim 27, and further comprising steps of:
sensing the humidity of the gas as it exits the chamber; and
monitoring the humidity of the gas exiting the chamber.

29. The method of claim 28, wherein the step of monitoring comprises determining when the volume of liquid in the chamber requires replenishing based on the humidity of the gas in the chamber.

30. The method of claim 28, wherein the step of monitoring comprises determining when the relative humidity of the gas in the chamber drops below a relative humidity threshold.

31. The method of claim 28, and further comprising step of heating the gas within the chamber with a heating element.

32. The method of claim 30, and further comprising steps of:
sensing the temperature of the gas as it exits the chamber; and
controlling electrical power to the heating element so as to regulate the temperature of the gas as it exits the chamber.

33. The method of claim 32, and further comprising the step of terminating electrical power to the heating element when it is determined that the humidity of the gas in the chamber drops below a critical relative humidity threshold.

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